



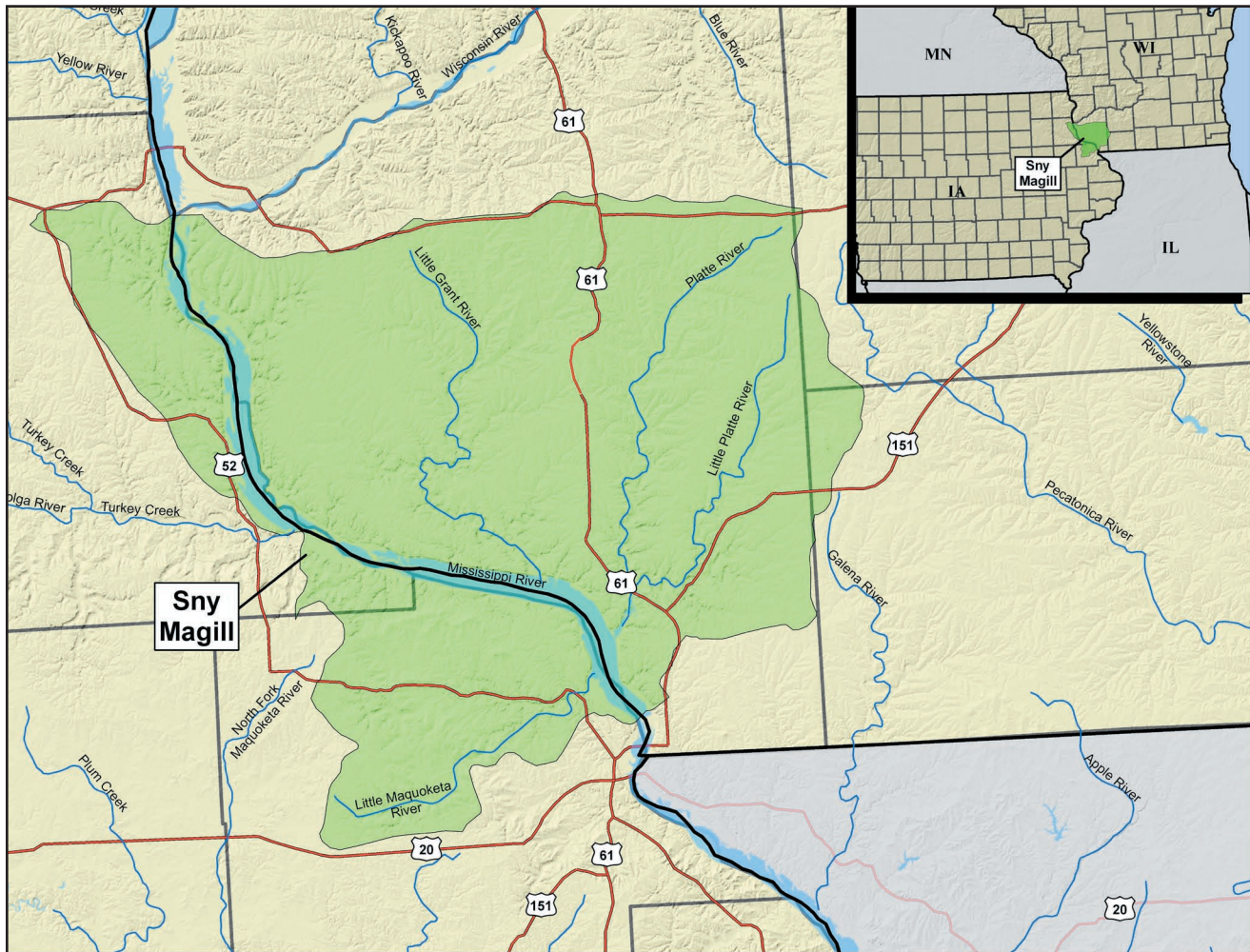
United States Department of Agriculture

Conservation Effects Assessment Project (CEAP)

Watershed Fact Sheet

Sny Magill Creek Watershed, Iowa*

A CSREES* Competitive Grant Watershed, one of 24 CEAP watershed projects.



CEAP Assessment

*This CEAP study is linked to the Walnut Creek watershed study.

Determining which combinations of conservation practices and respective placements within the watershed will achieve local water quality goals for sediment, nitrogen, and phosphorus loads.

- Karst features (caves, sinkholes, and springs) are common throughout the watershed.
- Impaired water quality parameters: Sediment, nitrogen, and phosphorus.
- Watershed is a Clean Water Act Section 319 grant demonstration and monitoring project.

Watershed Description

- 22,541 acres
- 49% forest, 24% pasture, 26% cropland
- Sny Magill Creek and North Cedar Creek (a tributary) have been designated as “put and take” fisheries by the Iowa Department of Natural Resources.

Issues: Sediment lost from the agricultural landscape has been identified as the primary source of water quality impairment. Nutrient losses to the stream system are a secondary source of impairment.

* Cooperative State Research, Education, and Extension Service



NRCS Hydrologist Laurel Foreman uses a Global Positioning System (GPS) and personal digital assistant (PDA) to record status of a Conservation Reserve Program (CRP) filter strip planting in Cass County, Iowa.



Students collect and test water samples from a small stream in Iowa.

Approach

Water Sampling: Nitrogen, phosphorus, sediment, and bacteria

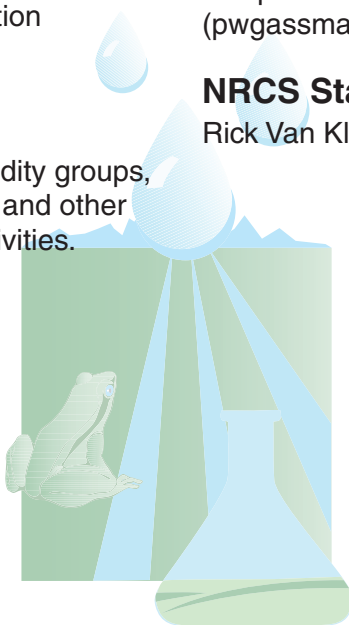
Watershed Models: SWAT (Soil and Water Assessment Tool)

Water Monitoring: EPA Nonpoint National Long-Term Monitoring Project

Assess Practices: Conservation tillage, terraces, grassed waterways, strip cropping, and contouring, nutrient management and other production practices.

Communicating Results

Extend findings to watershed and commodity groups, environmental groups, state government, and other interested parties through a variety of activities.



Collaborators

- USDA Agricultural Research Service, National Soil Tilth Laboratory
- Iowa Department of Natural Resources
- Iowa Department of Agriculture and Land Stewardship

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